NJDOT Bureau of Research QUARTERLY PROGRESS REPORT

Project Title:	Transit Signal Priority; Systems Application and Technology				
	Investigation				
RFP NUMBER: 0FHWA-NJ – 2005-019		NJDOT RESEARCH PROJECT MANAGER: Vincent			
		Nichnadowicz			
TASK ORDER NUMBER:02		PRINCIPAL INVESTIGATOR: Pippa Woods			
Project Starting Date:		Period Starting Date: 9/5/08			
Original Project Ending Date:		Period Ending Date: 12/31/08			
Modified Completion Date:					

Task	% of Total	% of Task	% of Task	% of Total
		this	to date	Complete
		quarter		
Task 1 - survey of national TSP	25	0	100	25
location analyses				
Task 2 – Develop an intersection	30	0	100	30
based TSP evaluation process and				
associated guidelines				
Task 3 – Demonstrate the	25	0	100	25
evaluation process through three				
case studies				
Task 4 – Report on the status and	10	0	100	10
findings of the research effort				
Task 5 - Meetings and	10	0	100	10
Presentations.				
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TOTAL	100%			100 %

Project Objectives:

The objective of this research is to develop an evaluation process that will assist NJ Transit in quickly determining which intersections are good candidates for TSP. This evaluation process is applicable for passive and active TSP and could be applied to a variety of roadways, including urban arterials, state routes, and county roads.

Project Abstract:

In New Jersey, priorities and capital investment strategies are focusing on improving bus service, including express and Bus Rapid Transit (BRT) in key corridors. One key technological component of these investment strategies is Transit Signal Priority (TSP). The New Jersey Department of Transportation, Bureau of Research, in partnership with New Jersey Transit (NJ Transit) engaged Cambridge Systematics, Inc., (CS) to develop an approach that quickly and cost-effectively determines where TSP is appropriate and could make the most impact on improving operations and, therefore, service.

The research was conducted in five main tasks over a four-month period. Task 1 included a high-level survey of TSP implementations across North America to identify any intersection-level screening criteria either that were used during deployment or that could be recommended based on experience. Task 2 included the development and refinement of an intersection screening procedure based on experience elsewhere and applicable to New Jersey. Task 3 included the application of the screening procedure to three example corridors identified by NJ Transit. Task 4 included documentation of the research in this report. Task 5 included presentations to various stakeholders.

1. Progress this quarter by task:

Task	Work Completed	Percent Complete
1 – survey of national TSP location analyses	Contacted transit authorities who have deployed TSP. Organizations included: Portland – TriMet, Vancouver – Translink, Los Angeles – LACMTA, Chicago – RTA, CTA, Pace, Oakland – AC Transit, Toronto and NYC Transit.	100%
2 – Develop an intersection based TSP evaluation process and associated guidelines	Finalized draft scoring approach and submitted to stakeholders on 11/18.	100%
3 – Demonstrate the evaluation process through three case studies	Applied scoring methodology to three corridors	100%
4 – Report on the status and findings of the research effort	Developed draft and final report Delivered 12/08.	100%
5 – Meetings and presentations	 Held kick-off meeting Completed survey work for Task 1 and 2. Met with client to discuss the findings 10/23 and 11/18. Held coordination conference calls bi-weekly Held final meeting with NJDOT 12/11. 	100%

2. Proposed activities for next quarter by task None

3. List of deliverables provided in this quarter by task (product date)

Task 4 – Draft and Final Report delivered December 2008.

TSP Methodology Spreadsheet delivered December 2008.

Task 5 – Various PowerPoint Presentations of Project.

4. Progress on Implementation and Training Activities NA

5. Problems/Proposed Solutions NA

Total Project Budget	\$80,180
Modified Contract Amount:	-
Total Project Expenditure to date	\$77,320
% of Total Project Budget Expended	96%